Lyman (G. H.)

Notes on

Cases of Pelvic Effusion resulting in Abscess

BY

G. H. LYMAN, M. D.
PHYSICIAN TO THE BOSTON CITY HOSPITAL

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NOTES ON CASES OF PELVIC EFFUSION RESULTING IN ABSCESS.

BY G. H. LYMAN, M. D.
Physician to the Boston City Hospital.

DURING a recent examination of the gynecological records of the hospital, for another purpose, my attention was attracted to these cases, and it seemed desirable that so large a number should be at least summarized, if only to show the hopeful prognosis which may be indulged in, especially when they can be recognized in their earlier stages and subjected to proper treatment.

From 1875 to 1880, inclusive, one hundred and forty-six cases of pelvic effusion have been treated by my colleagues and by me in the City Hospital. These cases were admitted of course at all stages of the disease, from simple effusions resulting from pelvic peritonitis and requiring only rest, fomentations, and other simple treatment for their relief, to the graver cases of cellulitis, hematocele, etc., in various periods of development, often with obscure or false histories of the causes and earlier symptoms, and so far advanced as to render an accurate differential diagnosis impracticable, — of these, there were forty-one which either were already at the time of admission, or soon afterward became, cases of pelvic abscess. Some had symptoms of commencing suppuration, others had recognizable fluctuation, and in a few of them purulent discharges were already established through spontaneous openings.

It is not the design of this paper to enter upon any elaborate discussion of the pathology of the disease, but a few general remarks may not be considered as inappropriate.

Numerous designations have been employed to express

the various conditions resulting from inflammation of the serous and cellular tissues in which the pelvic organs are imbedded. The term perimetric inflammation proposed by Dr. Barnes [1] seems, practically, as good as any, it being inclusive of both para- and peri-metritis, pelvic cellulitis and pelvic peritonitis, although its inadequacy is at once recognized by him in the sentences immediately following, as not including metritis and ovaritis, and requiring, therefore, a special definition for puerperal cases.

Competent authorities are much divided as to the clinical value of the pathology which leads to these various designations, and the possibility of a positive differential diagnosis. In the initial stages, the discrimination often may and ought to be made, but more frequently the opportunity for this is lost, and the patient comes first under observation with a complication of symptoms, and such extensive inflammation and tenderness of the parts as to preclude any positive assertion of its origin in the uterus or the ovaries, the cellular tissues or the peritoneum. Even when seen post mortem, the matting together of all the pelvic contents makes it often impossible to trace satisfactorily its primary starting-point. That the intimate connection between the peritoneum and the delicate cellular tissue underlying it, taken in connection with the extreme vascularity of the parts, could be subjected for any definite period to acute inflammatory processes without involving both to such a degree as to make differentiation impossible, is a clinical fact which few will be disposed to question.

We, doubtless, often have an acute pelvic peritonitis, with such distinct effusion of serum or blood as to be recognizable to the vaginal touch, without inflammation of the sub-peritoneal cellular tissue, — at all events, without necrosis or suppurative action in that tissue. We now know that such cases are extremely frequent, and that they generally result in absorption and complete relief.[2]

We may, likewise, have an acute cellulitis, especially about

[1] *Diseases of Women*, page 483.

[2] Of one hundred and forty cases admitted to the City Hospital

the cervix and lower parts of the uterus, with the inflammation and edematous swelling perfectly recognizable, which disappears under appropriate treatment without suppuration, but it is hardly credible that cellular inflammation about the sides of the uterus, within the folds of the broad ligament, or in the iliac fossæ, should exist without involving, sooner or later, the peritoneum for which it serves as a basis; from which period the discrimination is practically useless.

Dr. Barnes[1] doubts whether inflammation ever begins in the pelvic peritoneum unless kindled by some irritating matter poured into its cavity, — the neighboring organs being healthy and not furnishing offending matters through the circulation.

Dr. Matthews Duncan,[2] also, is very positive in his belief that "parametritis and perimetritis are never idiopathic or primary." Notwithstanding such authority, however, it is difficult to believe that simple exposure to cold, for instance, among other causes, should not induce, especially in non-puerperal cases, like results here as in pleuritis or general peritonitis. I am confident that I have seen such occurring during the intermenstrual period, and in otherwise healthy people, where there was no evidence whatever of endometritis, nor overflow from catamenial or other causes, as indeed Dr. Barnes himself seems to admit further on.[3]

Etiology. — Without discussing here the necessity of the distinction to be made between puerperal and non-puerperal antecedents, it is sufficient for my present purpose to say, in general terms, that the causes of pelvic abscess must be sought for in those diseased actions which lead to its first stage, that is to say, in those pathological conditions which induce peritonitis, cellulitis, hematocele,

eighty-eight recovered entirely, there were five deaths, and the remaining forty-seven cases left the hospital, as a rule, convalescent. Had relapses occurred, they would in all probability have returned. Vol. iii., *City Hospital Reports*, 1881.

[1] *Diseases of Women*, page 481.

[2] *Parametritis and Perimetritis*, page 53.

[3] Page 484.

etc., such as metritis, endometritis, uterine phlebitis, or lymphangitis, fetal decomposition in utero, hemorrhages from rupture of a Fallopian tube, or varix, or by direct exudation from the peritoneum, as described by Virchow, the transmission of gonorrheal or other poisonous matters, or irritating injections through the Fallopian tube, ovarian abscesses, ruptured cysts, extra-uterine pregnancy, and menstrual congestions from bathing or improper exposure, especially during the menstrual period. To these may be added, as well recognized causes, injuries to the cervix by laceration or the knife, the unskillful use of pessaries, sounds, and tents, intra-uterine medication, excessive coition, and accidents from falls, blows, over-straining, etc.

"Many of the bad results" met with in the treatment of diseases of women "may be attributed to the existence of unrecognized cellulitis," and if we add to this "pelvic peritonitis" this observation of Dr. Emmett's [1] is eminently true. Of these "bad results," I am convinced that none are more unfortunate than those arising from the neglect of the early recognition of commencing suppuration.

Among the cases appended to this paper there were many in which not only the primary cellulitis, peritonitis, or hematocele had evidently never been recognized, but which on entrance to the hospital had well-developed but unsuspected fluctuation. No doubt there are occasional obscure cases free from pain or other local symptoms, and well calculated to deceive the general practitioner; likewise cases of extreme vesical irritation simulating cystitis, of rectal irritation and tenesmus simulating dysentery, of hematoceles with abdominal enlargement and tenderness simulating general peritonitis, cystic ovary, or fibroid, — but it is safe to say that in a large majority of these cases the proper vaginal examination and a due regard to the antecedent history, should lead to a correct conclusion.

The truth to be reiterated is, that the great frequency of pelvic effusion is not sufficiently insisted upon by gynecological writers. A comparatively large proportion of the

[1] *Principles and Practice of Gynecology*, page 256.

cases terminate by absorption ; the physician, not recognizing the local lesion, comforts himself in the delusion of a successful treatment of cystitis or dysentery. It should be clearly recognized that neither pain, nor abdominal enlargement, nor menstrual irregularities, are necessary factors of pelvic peritonitis, and that, in the absence of one or all of them, a distinctive suppurative process may be going on, to be revealed only after irreparable damage. Alluding to the very common belief of the predominance in these cases, of cellulitis over peritonitis, Duncan[1] says : "Divesting. the mind of the invariable association of local peritonitis with urgent and acute symptoms will make way for the admission of a true pathology." Encysted purulent deposits may, as is now well known, remain for long periods quiescent and unsuspected, even perhaps until revealed post mortem, but unfortunately such is not the rule, for, usually, pus in the tissues is seeking an outlet. The surgical maxim to render this outlet a safe one by the knife, aspirator, or otherwise, if neglected here is quite likely to result in an unsafe one into the peritoneum, the groin, the thigh, the bladder, the rectum, one or more of them, or, by chance, the patient may be fortunate enough to get a vaginal opening. Barnes[2] believes the latter to be the route most frequently selected, but this is not the general belief. Of the cases here reported spontaneous opening into the rectum occurred in eleven instances, and into the vagina in three only, excluding Case XL., which is doubtful. Brickell[3] says : "I have never seen spontaneous discharge through the vagina, while I have seen all the other named terminations.

Admitting, then, the primary importance of an early recognition of the effusion, whether it be the serous exudation from the inflamed peritoneum, the various sanguineous effusions which are comprised under the general term hematocele, or the edematous engorgement of cellular tis-

[1] *Parametritis and Perimetritis*, p. 79.
[2] *Diseases of Women*, p. 492.
[3] *Amer. Jour. Med. Sciences*, vol. lxxiii., p. 362.

sue, the next step is a careful tracing of its history. If its history be puerperal (including, of course, abortions), we may have a phlegmon, terminating in iliac abscess, purulent deposits of septicemic origin through either blood-vessels or lymphatics, a localized peritonitic effusion, a hematocele from ruptured varix, or a cellulitis from torn or bruised cervix. In a large proportion of these puerperal cases, however, but little time or opportunity is generally available for the diagnosis of localized pus or for its surgical treatment. The emergencies must be first met in other ways, as by quinine, opium, intra-uterine injections, etc.; but, on the other hand, very many cases are encountered of undoubted puerperal origin, dating back not only months but years even, with a clear, consecutive history, of "a poor getting up," general debility, constant recurrence of "chilly sensations," rigors even, profuse perspiration, painful defecation, uneasiness or pain in the lower bowels, diarrhea and dysenteric tenesmus, irritable bladder, and neuralgic pains or edema of the lower extremities. These are very commonly associated with febrile, pulmonary,[1] gastric, or hepatic symptoms, to distract the attention of both patient and physician from the real seat of disease, until a fall, a blow, excessive coition (of which instances are not rare even under these conditions), or any other exciting cause lights up acute inflammatory action. In this connection some forms of extra-uterine pregnancy are naturally suggested, in which the history alone will be our guide.

The large majority of cases, however, of pelvic effusion are not of puerperal origin. Interference with the menstrual function by fatigue, chills from cold bathing or otherwise, excessive coition, the extension of gonorrheal secretions through the Fallopian tubes,[2] operations upon the

[1] "I have more than once seen the hectic accompanying a pelvic abscess mistaken for the hectic fever of phthisis." Simpson, *Obstetric Works*, vol. i., p. 23. See, also, Case IV., appended.

[2] See Noeggerath, *Transactions of American Gynecological Society*, vol. i., p. 268.

cervix, intra-uterine applications, the sound, the pessary, are all more or less fruitful causes of peritoneal or cellular effusion. I have met with but one case in which there was suspicion of "malignant" origin (Case XXXIX.), and that a doubtful one, as the epithelial element was not manifested until late in the disease. There can be no doubt, however, that cancerous affections may be the cause.[1]

From errors in diagnosis again, effusions are sometimes unfortunately mistaken for something else, — phthisis, for instance, as in Case IV., or retroversion, as in Cases IX., XII., XVII.,— where valuable time was lost, to say nothing of the added irritation, induced by attempts to rectify the supposed malposition. In such cases the displacement caused by the effusion may give a false interpretation to the indications afforded by the sound, if due attention to the earlier history be neglected.

The effusion from a ruptured ovarian cyst will generally have an antecedent history of abdominal tumor, with its sudden collapse and acute symptoms; and so of ruptured tube in Fallopian pregnancy, the history is usually a short one, with the symptoms of early pregnancy, acute pain, sudden collapse, and the ordinary signs of internal hemorrhage, with which all are supposed to be familiar. In abscess from hematocele the usual symptoms accompanying blood-effusion may fail entirely, as in the case reported by one of our members, Dr. Scott, of San Francisco, where the puncture was made for supposed retention of the menses.[2] Malgaigne opened an hematocele, mistaking it for a fibrous growth, and Professor Stoltz, of Strasburg, made the opposite mistake, giving a clinical lecture upon a supposed case of fibroid tumor, which proved eventually to be an hematocele.[3]

A uterine fibroid may thus by its locality, its pressure and the dislocation of the parts, simulate an ordinary pelvic

[1] See Duncan, *Parametritis and Perimetritis*, p. 49.

[2] See *Pacific Med. and Surg. Journal*, November, 1878.

[3] See Bernutz et Goupil, *Clin. méd. sur les maladies des femmes*, vol. i., pp. 280–283, where the cases are narrated at length.

effusion, but the earlier history will rarely fail, when aided by the sound and the *tactus eruditus*, to keep us from error, for acute effusions are usually accompanied by acute symptoms, following incidents which the patient rarely fails to recognize as cause and effect, and to dwell upon as such, whereas uterine fibromata are insidious in their development, their presence being, as it were, accidentally revealed.

A simple effusion may also be mistaken for cancerous disease. Simpson,[1] so long ago as 1846, relates four such cases.

Eliminating, however, such sources of error, and the presence of effusion being satisfactorily recognized, we may expect to find one of several conditions, all of which are to be considered, in view of subsequent treatment. The mere presence of effusion, it need hardly be said, is not of necessity an excuse for operative interference. A large majority of the peritoneal and cellular forms are unquestionably absorbed.

Too early interference with an hematocele or an extra-uterine cyst may induce the very conditions it is our object to avoid. The tumor may be very small, firm, free from tenderness, confined to a limited locality about the cervix, and with little, if any, displacement of the uterus; or, through every intermediate degree of development, it may completely fill the pelvis, extending even into the abdomen, soft, fluctuating, and by its pressure displacing the uterus, The latter cases need no comment in this connection as to diagnosis or treatment, my object being more to direct attention to the first-mentioned class, in which the early diagnosis of suppuration becomes of vital importance, with reference to prognosis and treatment. This diagnosis, of course, is more difficult the nearer we are to the beginning of the suppurative process, and the depth at which it occurs; but in doubtful cases, especially if we have "chilly sensations," vaginal heat, throbbing, tenesmus, and other dysenteric symptoms, delay increases the peril to the patient, and

[1] *Obstetric Works*, vol. i., 485.

should stimulate to constant watchfulness. The relaxation and the greater freedom of manipulation attainable by the use of anesthetics, render them invaluable, often indispensable. While waiting for positive evidences of fluctuation a large collection of pus may burst into the general peritoneum, or, burrowing its way here and there, seek a spontaneous outlet in the groin, thigh, or elsewhere.

As before stated, the discovery of a tumor caused by effusion does not, unless there be inflammatory symptoms threatening suppuration, necessarily demand local surgical interference ; but if fluctuation be superadded, the question at once presents itself, Shall an effort be made to evacuate it? Manifestly the answer depends upon the constitutional symptoms, and the differentiation which we may be able to establish between pus, serum, blood, etc. If the contents be serous, as after an acute attack of pelvic peritonitis, I believe that delay is preferable to haste, experience proving, to my satisfaction at least,[1] that absorption is the rule, interference being called for only by undue delay in this process, or by the first advent of threatening symptoms. The analogy is marked between effusions into the tunica vaginalis, as pointed out by Bernutz,[2] the pleura, and the pelvic peritoneum. The proportion of cases in which an effusion of serum into the tunica vaginalis (as the result of a frank inflammation) terminates in suppuration is comparatively small, and certainly my experience, so far as it goes, in the treatment of pleuritic effusion would not justify its removal by paracentesis, unless life were endangered by mere mechanical compression, without first giving a fair chance for absorption. I have removed large quantities of pure serum from the thorax, and with great temporary relief ; but more often the relief has been only temporary, — for what is usually the result of a second aspiration, — a milky serum, — and of a third aspiration, — pure pus. Of the cases here reported, Nos. I., IV., and XXVIII.

[1] See *Reports of Boston City Hospital*, 1881.

[2] *Archives générales de médicine*, March, 1857, p. 14.

are noticeable in this respect.[1] I would repeat that I am here alluding to cases of simple inflammation, not cases with a tubercular complication. Perhaps if the experience of judicious practitioners was more fully attainable, such results would be less readily attributed to "carelessness in the admission of air," "the neglect of antiseptic precautions," etc.

I have learned, in such cases, to "make haste slowly," and, by the use of iron internally and vesication and iodine externally, to avoid the risks incident to the most careful puncture. Dr. Brickell[2] is a strenuous advocate for the early removal of all effusions, whether they be serous or purulent. Some of his cases, as well as some of those appended to this paper, would apparently favor this view, but they are altogether too few to establish a rule in opposition to the large number of cases of undoubted serous effusion from pelvic peritonitis, which recover easily, quickly, and safely by absorption.[3] The same remarks are applicable to hemorrhagic effusions. The danger of exciting suppuration in a large hematocele all will admit. Delay favors absorption of the thinner portions at least, and thus gradually removes the pressure from the hemorrhagic source, so that later, should it become necessary, a free opening and levigation of the sac by carbolized or other injections becomes by so much the less hazardous.

Should it, however, be determined that the fluctuation when found is due to pus, the above maxim should be reversed, for "making haste slowly" here means an extension of the abscess, increasing exhaustion, and a larger mortality.

Where the diagnosis is positive, the rule of treatment seems to me sufficiently clear; and in obscure cases an early solution of the doubt where practicable is of the highest importance.

[1] See, also, Case VIII. of Brickell's, *Am. Jour. Med. Sciences*, vol. lxxiii., p. 366.

[2] *Am. Jour. Med. Sciences*, vol. lxxiii. p. 368.

[3] See vol. iii., *Boston City Hospital Reports*, 1881.

This doubt can often be dissipated by the use of an aspirator, which, if thought best, may be as fine as a hypodermic needle. It incurs so trifling a risk, unless very recklessly used, as to be hardly worth considering, in view of the possible beneficial results. I have inserted the trocar both too early and too late. In the former I have had no occasion to regret it, in the latter I have. Dr. Priestley,[1] referring to the differences of opinion on this point, says: "In most cases spontaneous evacuation will take place at the best possible time, and in the locality, considering all circumstances, sufficiently favorable without the intervention of the surgeon." The usually tedious convalescence after spontaneous openings into rectum, bladder, or groin, the burrowing sinuses and general infiltration of all the surrounding tissues, as compared with the generally more rapid convalescence which follows when the pus is early found and early evacuated (per vaginam, if possible), lead me to believe that the ordinary surgical rule is the safest and the best.

Dr. Thomas[2] recommends "the delay of surgical interference until the presence of pus is an absolute certainty." This opinion from one whose acknowledged surgical skill and boldness must give it a wide influence I cannot but think much too conservative. The case which he quotes from Simpson[3] indicates very clearly the danger of delay, as well as many others which might be quoted, in which over-prudence has subjected the patient to unnecessary risks. Many of the cases appended to this paper are of interest in this connection (as numbers 2, 4, 5, 6, 10, 11, 19, 20, 26, 29, 31, 37, 38, 39), and on the other hand many will be noticed as being equally suggestive of the advantages of an early opening. It is admitted that purulent cysts may remain for long periods and be revealed only post mortem, but we cannot forget the extreme liability to sudden development from numerous causes of injury, and es-

[1] Reynolds' *System of Medicine*, vol. iii., p. 850.
[2] *Diseases of Women*, page 505.
[3] *Obstetrical Works*, vol. i., p. 65.

pecially from the frequent pelvic engorgement to which women are necessarily subjected, both in the parturient and the non-parturient states. The rule so commonly followed that the time of opening is to be governed by the condition of the patient and the constitutional symptoms, that is to say, that if there be no especial anemia nor exhaustion, neither rectal nor cystic irritation, gives too much latitude, for unquestionably the purulent cyst may attain considerable magnitude, involving a large extent of tissue, before decided constitutional symptoms manifest themselves. In proof of this cases will be found subjoined of laboring women who had so little constitutional disturbance as to be able to continue their daily duties until within a few days of their admission, who were found to have pelvic abscesses of such magnitude as to require long treatment, with no little danger of ultimate exhaustion.

Some other points with reference to treatment may be briefly alluded to.

The ordinary surgical rule of securing a dependent permanent opening may be secured by the use of drainage tubes or by the daily stretching of the opening by a large sound or metallic bougie, when free incisions are not practicable.

In cases of spontaneous opening into the rectum or bladder a counter opening into the vagina may, if it can be obtained, hasten the contraction and obliteration of these fistulæ.

In hospital cases, after contraction of the cyst and the cessation of suppuration, the patients are usually lost sight of. The remaining induration gives them little if any uneasiness, and they either leave of their own will, or it may be, in crowded times, that their places are required for others. They, however, are never entirely safe from a recurrence so long as any induration remains, a fact which is exemplified by their return to the hospital, some of them several times. Either from sexual intercourse or other cause the induration proved to be the focus of renewed suppuration For this remaining induration blisters and

iodine above the pubes, iodine and glycerine to the vaginal vault, either by the brush or tampons, and the careful use of hot water injections, have been found to be of the greatest service.

It often happens that after free evacuation the drainage so diminishes as to promise a speedy cure, when a sudden access of pain and febrile symptoms occurs, followed by an abundant discharge of offensive pus, requiring a renewal of the treatment. In such cases the old locality may be the seat of the recurrent inflammation, or, as is more probable, the surrounding indurated tissues have taken on suppurative action.

In all cases where the discharge is offensive, a prompt subsidence of pain, temperature, pulse, etc., will generally follow a careful washing of the cyst by injections of carbolized water, or solutions of permanganate of potash, and if the discharge shows no disposition to diminish, the direct application of tincture of iodine hastens the ultimate cure by its action on the pyogenic surface. The danger from rupture, if the injections are prudently made, is less than that which the patient incurs from exhaustion.

If the discharge be inodorous, injections of the cyst are to be used, if at all, with even more caution and at longer intervals, as the repeated distention of the sac may interfere with its contraction, or even cause a rupture at some thin point and escape of irritating matters into the surrounding parts.[1]

The cases are exceptional in which pain is not so markedly relieved by the evacuation as to permit the discontinuance of opiates by the mouth, and the substitution of hydrate of chloral by the rectum or vaginal suppositories of belladonna and hyosciamus.

My object in bringing this paper before the Society has been to direct your attention more particularly to the following considerations: —

1st. The necessity of a more general recognition by the profession at large of the fact that pelvic effusions are of

[1] See Case XL., in which this probably occurred.

extremely frequent occurrence, that they very often are not recognized, through error in diagnosis, and especially from the fact that, when arising from pelvic peritonitis, they are commonly absorbed, leaving only a focus of induration.

2d. The extreme importance of recognizing in these effusions the earliest advent of suppuration, and in doubtful cases the propriety of a resort to the aspirator, as being the least of two evils.

3d. Suppuration being recognized, the importance of giving early exit to the pus, per vaginam, if by any means this can be safely accomplished, before the danger is incurred of its extension to the surrounding tissues with long-continued and exhausting discharges, too often resulting fatally.

The paper makes no claim to anything beyond what its title imports, namely, "Notes," suggested by a review of the cases which have been recently under the observation of myself and my colleagues at the Boston City Hospital. The records appended are, I am quite aware, often imperfect, and especially in their antecedent history; but each has, in one way or another, some practical bearing upon the subject. To save space, they have been condensed as much as possible, consistent with the preservation of details bearing upon causes, symptoms, diagnosis, and treatment, and the record of autopsies, when such were had.

Since 1843 there has been a long list of contributions to this subject, the most systematic being the work of Bernutz, 1857 and 1862. Among the most recent are those of Dr. Priestley, in "Reynolds's System of Medicine," under the various heads of Hematocele, Peritonitis, and Cellulitis.[1]

Case I. — S. G., single, seventeen. Entered January 13, 1875. Picked up in snow, and brought in with baby two weeks old, by police. Had been turned into street by her father the previous evening. Says she flowed largely at confinement, and that the placenta was removed at end of five hours. Did very well until

[1] Vol. iii., pages 833 and 851.

two days ago, when she was chilled in a cold room and had severe pain, followed yesterday by rigor and cough. Anemic, emaciated, abdomen soft, some uterine pains, micturition free, some dyspnea, too weak for careful examination of chest.

February 2. Chills this morning. Pulse 160, respiration 48; no milk; rallied a little and slept quietly.

February 14. Vomited; respiration still rapid. She gradually failed, and died the 16th.

Autopsy. — Right lung completely adherent; near base an old abscess, size of nutmeg; otherwise lung healthy, though slightly congested; hemorrhagic infarction in lower lobe of left lung one half inch in diameter; spleen normal; right kidney small, left enlarged and cloudy; uterus measured six inches, white, soft and flaccid; ovarian vessels large and prominent; uterus so thin anteriorly that in turning it back a rupture was made just above utero-vesical reflection of peritoneum. On opening the uterus a slough was found over this thin spot, probably the site of placental attachment. There was pus in one of the uterine sinuses and a small abscess near the right ovary. *There was no peritonitis.*

Note. — Autopsy illustrates the incipient stages of pelvic abscess.

Case II. — A. D., aged thirty, married. Entered hospital February 17, 1875. Generally good health; two children; seven to eight months pregnant. Three weeks ago began to feel sick, "blood going to left leg;" a week since caught cold, left off work, had vomiting, headache, pain in chest, and cough with bloody sputa; "has hardly ceased vomiting for five minutes since." Is much exhausted, eyes sunken, voice harsh, pulse hardly perceptible, some jactitation, abdomen not tender, uterus extends half way from navel to ensiform cartilage; enlarged veins hard and cord like on the upper outer side of left leg; is constipated; urine free, but "looks black." Under stimulants and anodynes she improved rapidly until March 16, when she had a normal labor, with but little flowing.

March 17. In the evening had "chilly sensations," and the next day had "several chills," with pain in back and bones; milk abundant. Under quinine, etc., she improved rapidly until April 11, when she complained of "sweating"; otherwise comfortable. On the 26th she felt well enough to be discharged, at her own request.

May 12. She returned. Has done no work; stopped nurs-

ing two weeks ago ; has cough ; no pain in chest, *no abdominal tenderness*, but a hard tumor is felt in the lower abdomen to left of median line ; urine free, one watery dejection a day. By vaginal examination a mass size of fetal head was felt extending above pubes on left side ; tender on pressure ; uterus forward, to the right, and fixed ; anterior and left cul-de-sacs full ; sound passed two and one half inches only.

May 16. Comfortable ; *no complaint of pain.* Has had "little chills" occasionally for some weeks.

May 23. Now complains of some pain in left side, and perspires a good deal.

May 27. Lump smaller and less tender ; has passed pus from the rectum ; uterus remains fixed and crowded forward by the mass, which is tender. *No fluctuation* can be detected by vagina or rectum.

June 9. Tumor smaller, less painful ; but has pain in the perineum.

June 14. Pain in the rectum, and diarrhea.

June 19. Recto-vaginal fluctuation now evident, extending behind the uterus. By incision a large quantity of "blood intermixed with serum and pus" was evacuated. This was kept open for ten days, when the pain and discharge wholly ceased.

August 14. Discharged well.

Note. — The hematocele probably occurred before labor, possibly from the rupture of a varix. The septicemic symptoms following labor naturally led to extra caution as to interference, otherwise the use of the aspirator on her reëntrance would perhaps have saved a month of suffering and risk.

Case III. — L. M., single, aged twenty-three. Entered June 14, 1875. In good health until four weeks since, when she "*took a cold bath*, and dressed in a thin dress" a week after cessation of the catamenia. The next morning had leucorrhea and some pain in the finger and hip. Was not confined to bed. The ensuing menstrual period was painful toward the end, and she "vomited." Has had more or less pain and flowing at intervals since. The menses she thinks are now "regularly" present. Complains only of some tenderness on pressure in the left inguinal region. Abdomen soft, bowels constipated, micturition free.

June 29. By vaginal examination fluctuation was found, and six ounces of "laudable pus" was drawn from the lateral cul-de-sac. Remained a month in hospital and was discharged well.

Note. — No report of chills or other symptoms except tenderness in left iliac region.

Case IV. — B. F., single, twenty. Entered April 23, 1876. Never sick before this attack. A week ago, after long exposure and fatigue, had a chill, severe abdominal pain, and diarrhea. In bed since. Is constipated, feels weak, abdomen soft, but tender on pressure in right iliac region. Pulse 100; temperature 102.7°. A few râles under left clavicle.

May 2. Has night sweats, left hospital, and was "comfortable" until May 18, when she returned, complaining of a return of the abdominal pain, and soreness and distress from her food, — night sweats continue.

June 10. In right iliac region, near median line, a round, painful tumor is felt.

July 21. Symptoms have continued much the same. Uterus is now enlarged, the fundus in hollow of the sacrum, os forward, whole organ fixed. The tumor above the pubes now reaches to within half an inch of umbilicus, easily circumscribed laterally, and not sensitive to pressure. Sound passes two inches and a quarter. Deep posteriorly an *indistinct fluctuation* is discovered.

August 2. Nausea, dysenteric symptoms, pain, tenesmus, and some blood.

August 4. Aspirated per vaginam, and six ounces of *bloody serum* drawn.

August 18. During last week has had pain. Fluctuation distinct above pubes and in vagina. Again aspirated, and nearly three ounces of pus obtained.

August 21. Weaker and more anemic.

August 24. Again aspirated. Eight ounces of pus. The opening was enlarged by bistoury, the sac washed, and a drainage tube inserted. Injections to be kept up.

September 3. Both the purulent discharge and the pain have *ceased since injections were used.* Swelling above pubes and in posterior cul-de-sac much diminished.

September 19. Some tumefaction behind cervix. Opening closed.

October 13. Nothing found but uterus drawn down toward perineum, and a month later the catamenia were reëstablished and she was discharged. She returned to Ireland, and died a year later, having had pus from the rectum before her death.

Note. — A broken-down hematocele. The diagnosis of phthisis

which she had upon entrance was probably immaterial, as the effusion was not large enough for recognition for some time. The rapid diminution of pain and discharge after thorough cleansing of cyst will be noticed.

Case V. — N. W., thirty-seven, married, entered July 15, 1876. No mention of children; never sick before. One month since took a bath while menstruating. This was followed by lancinating pains and swelling of the abdomen. Was able to work until a week ago, when the catamenia recurred, scanty and offensive, with tenderness on the right side. The pain continued until the 23d, when diarrhea and vomiting supervened. These symptoms continued more or less until September 1, when pain and edema in right leg were noticed, with tenderness above Poupart's ligament. The uterus was found high up, the sound giving no increase of depth.

October 3. An opening was made above Poupart's ligament, giving exit to a large amount of fetid pus, and she died of exhaustion, November 17.

Note. — For some reason the records of this case are imperfect, but there is no evidence that the abscess could have been reached earlier per vaginam. The cause and the short duration are noteworthy.

Case VI. — C. S., thirty, married, entered July 8, 1876. Sick nine weeks with pain in lower bowels. No children. Last menses profuse; has now dysuria, constipation, more or less flowing. Tumor in left iliac fossa, from one inch above anterior superior spinous process across to the right of, and two inches above, the symphysis, immovable and painful. For two months has had pain down left hip to foot. Cervix low, uterus pushed to right, a hard mass occupies left side of pelvis.

August 4. Behind and to left of the cervix an *indistinct fluctuation* was discovered, and half an ounce of thick sanguineous fluid was aspirated. This was followed by an increase of tenderness, sweating, and nausea, and death August 9. No autopsy.

Note. — No cause is given for the primary attack, though evidently a case of hematocele, and as such is given as illustrative of the danger of too early aspiration.

Case VII. — H. S., single, twenty-one. Entered February 16, 1877.

Last regular catamenia eleven weeks ago; has been flowing from miscarriage for five weeks; has pain in back, tenesmus, and

weakness; uterus size of a medium lemon; os admits two fingers; cervix occupied by soft, fetid, placental mass, extending to fundus. This was removed by fingers and forceps, with some hemorrhage, and the uterus syringed with carbolized water; to be repeated twice daily.

February 21. Cough, and pain under left nipple; headache; slight pain in lower bowels; vaginal discharge, small and inoffensive.

March 5. Catamenia recurred.

March 8. Severe pain in right hypochondria.

March 10. Restless, perspiring freely, rigors, and vomiting; pulse, 104; temperature, 100.5°; hypogastric pain extending down left sciatic.

March 15. Pains have ceased; uterus fixed; cul-de-sacs are now filled with a firm mass extending to the left, tender and fluctuating; per rectum a fistulous opening found on anterior wall and discharging freely.

April 5. Has continued comparatively comfortable until today, when she complains of excessive tenderness and pain in epigastrium and right hypochondrium. No pain in lower abdomen; distinct tumefaction over cartilages of eighth to tenth ribs, from which after incision there was free discharge of pus.

June 13. Uterus now movable; some painful induration remaining about cervix.

June 25. No tenderness remaining; sound enters two and three fourths inches. Discharged.

Note. — Pelvic abscess, septico-pyemic. Its recognition by digital examination coincident with spontaneous opening into rectum.

Case VIII. — L. B., twenty-two, married. Entered June 4, 1877.

Three months since had a seven months' child, with good recovery; did not nurse her baby. Three weeks later "took cold," and had severe abdominal pain, which has continued in right hypochondrium ever since. In same locality feels a "lump," which is increasing. During this time "has had a catarrhal discharge from the rectum; defecation very painful: pain comes on in paroxysms, at fifteen to twenty minutes' interval, with dysenteric tenesmus, but no fæces, *the discharge being greenish.*" Some days unable to walk upright because of pain; micturition dribbling, but no pain. By vaginal examination a large

firm mass is found to the right of and behind the cervix and beside the rectum; it is nodulated and puckered; it is also felt to right of median line, above pubes.

July 11. Steadily improving; much less pain, but in right iliac fossa the slightly tender mass is easily outlined between the brim of the pelvis and the median line.

July 13. More pain, after long interval of relief; inguinal glands swollen. Under fomentations, etc., the pain and swelling were gradually relieved, and a week later (18th) she was able to be discharged.

Note. The short time after delivery, and the probability that if properly aspirated before entering the hospital there would have been no rectal opening, or the risk of an opening in the groin, which she barely escaped, will be observed.

Case IX. — S. W., married seven years. Entered June 30, 1877.

No children; always in delicate health; catamenia always regular. Three weeks before took a cold bath at end of menstrual period, and has had since griping pains, low down on left side. Has now decided tenderness and swelling in left hypogastrium, — a hard, distinct mass, extending from median line nearly to anterior superior spinous process. There is also some fullness and tenderness on the right side. On vaginal examination the tumor fills the space to the left of the uterus, and on the right and higher up another and more tender mass is felt. Cervix low and immovable; sound enters two and three fifths inches; micturition frequent and easy, but followed by sharp, hypogastric pain; defecation very painful.

July 7. The tumor now fills the left posterior pelvic cavity, and presses deeply down on the rectum; very sensitive and with *doubtful fluctuation*. By aspiration, per vaginam, three and one half ounces of *serous* fluid was drawn.

July 11. Swelling now extends to two inches below umbilicus, and is hard and resisting. Per vaginam the mass not so low, but fuller on the right side, and connecting apparently with the left side. By rectal examination a small soft mass is felt in the lower posterior part; has much less pain, and is improving, but pain in defecation continues.

July 19. Hypogastric swelling has disappeared, slight tenderness remaining.

July 27. Is sitting up; anemic; no pain; bowels regular.

August 17. Discharged, well.

Note. — The anemia, the sudden advent of pain, the extent of the swelling, and the pressure upon the rectum, might, taken alone, have warranted a diagnosis of hematocele. The symptoms justified early aspiration, being much more urgent than in ordinary cases of simple serous effusion.

Case X. — S. G., single, twenty, prostitute. Entered August 15, 1877.

Says that she was never sick before. Delivered, July 28, of a dead child by instruments, after two days' labor. Reports that a large clot came away twelve hours after labor; that she was kept in bed ten days; had carbolized injections, and the urine was drawn for two weeks, after which she got up, walked about, and immediately had "pains, chills, fever, and sweats," which still continue; pulse, 128; temperature, 102.3°. In addition to a hard, circumscribed, *painless* swelling in the right inguinal region, she is suffering from pneumonia in right lower lobe.

August 22. Pneumonia nearly well. Since last report the mass in the inguinal region has disappeared by a free discharge of pus from the vagina. On examination the cervix is found obliterated, the os high up and continuous with the vaginal wall; behind and to the right is a large opening, discharging pus freely; the sound enters this opening two inches; perineum ruptured to sphincter.

September 15. The discharge gradually ceased, and, no tumefaction remaining she was discharged well.

Note. — The absence of pain and the pneumonic complication will be observed, as well as the spontaneous opening into the vagina instead of, as is more commonly the case, the rectum or bladder.

Case XI. — E. W., forty-four, married. Entered October 17, 1877.

Menses always painful, but not excessive; has had five tedious labors, and two miscarriages, without known cause. Fifteen years ago was examined for dysmenorrhea. Was told that she had displacement, and a pessary was worn for a while. Eight years ago had pain low down in her side, with an enlargement, which has since increased in size, and become more painful. She says this has been tapped (per vaginam) three times, the last time four months ago. Has now constant pain, intensified

by any exertion, walking or riding. Menses regular and not excessive.

October 25. Was aspirated, and one ounce of odorless *prune juice fluid* drawn. Canula left in. Fluid consisted largely of disintegrated blood corpuscles.

November 3. Much dirty matter washed out with carbolized water; injections to be continued daily.

November 25. Canula removed, its friction causing some vaginal irritation. Cyst injected with tincture of iodine (1 to 3). Doing well.

November 27. So well that she wished to leave, and was discharged.

Note.—Broken-down hematocele of long standing. Rapid improvement under medicated injections of the cyst. The probable error in diagnosis in the earlier stages, and the use of the pessary, will be noticed.

Case XII. — A. O'C., twenty-seven, married twelve years. Entered January 25, 1878.

Menses at sixteen, regular until last twelve months, since which has suffered from dysmenorrhea. In 1870 had induced abortion at third month. In 1871, after long labor, had still-born child. In June, 1877, on severe lifting, felt something give way. After this she had painful catamenia, vomiting, and debility, and was told that she had retroversion, for which she was treated. Now has pain down the hip and dysuria.

February 2. Menstruating.

February 10. On examination she is found to have an indurated mass to the right of the uterus, extending upward to base of bladder.

February 19. One pint of offensive pus drawn from front of cervix.

March 13. Has been more comfortable, but she still has pain, and for ten days more or less vomiting.

March 15. Occasional chills and profuse night-sweats.

March 19. Again aspirated, but no pus obtained.

May 21. Has continued improving slightly, but with some alternations. To-day was aspirated for the third time, but no pus reached, and as she has been up and about the ward for some weeks was allowed to go home at her own request.

April 27, 1881. Was again admitted. Says that she has had a slight discharge of pus from the *rectum* every day since leaving

hospital, but has been able to work in a printing-office. Two weeks ago, during a menstrual period, had a sudden severe cramp like pain in right ovarian region. No interruption of the menses nor increased flow. Five days ago had vomiting, and a similar pain, which still continues. Abdomen sensitive, cervix low and fixed, and a hard sensitive mass in the right cul-de-sac.

May 16. Improved. Induration smaller and less sensitive; pus found in rectum, but no opening. Still in hospital.

Note. — Chronic case, four years' duration. Illustrative of the liability to recurrence while induration remains. The rectal fistula is out of reach, and probably communicates with a separate abscess from the one which was aspirated three years before. An example also of probable error in diagnosis in the incipient stages.

Case XIII. — S. D., thirty-five, married. Entered February 26, 1878.

Has had cough for a month, and dysuria for a fortnight. Able *to work until two days ago*, when she was seized suddenly with abdominal pain, followed yesterday by nausea, vomiting, and swelled abdomen. The abdomen is now tense, tympanitic, and and tender. Pulse, 120; temperature, 100.5°.

March 4. Has had a sharp but short attack of pneumonia. Is now perspiring freely, and is very stupid, but improving.

March 5. By vaginal examination the cervix is found enlarged, hard, low down, and to the left. Uterus fixed. A firm mass in the posterior and right cul-de-sacs extends up into right side of pelvis.

March 13. From nausea is unable yet to take solid food. Has occasional pain in right side.

March 29. Uterus is pushed forward. Sound enters two and one half inches. The mass was punctured, and *eight ounces of greenish pus* withdrawn.

March 30. Has had continued nausea and vomiting, — no chills, no pain, and abdomen soft.

March 31. Better; nausea has ceased; catamenia have appeared.

April 3. Uterus now movable, and without pain. Some thickening remaining, but no defined tumor. Examination caused a little nausea and vomiting. On the sixth a very slight induration only remained behind the uterus, was well enough to sit up on the seventh, and on the eighth was discharged at her own request.

Note. — The condition of the patient forbade earlier aspiration. The rapid recovery following the removal of the pus is to be contrasted with the probable result if decided fluctuation had been waited for.

Case XIV. — C. N., twenty-seven, married. Entered March 17, 1878.

Admits induced abortion by rupture of membranes on March 1, under ether; with delivery of seven months' child the following day. Did well for four or five days. Has now painful erythematous blotches on arms and legs, large bullæ on two of them, right leg edematous, diarrhea, dejections black, no nausea or vomiting, some jaundice, and brown line from pubes to above umbilicus, abdominal skin congested, burning after micturition, catheter required, profuse leucorrheal discharge, abdomen slightly distended and tender, labia swollen and inflamed. No history of syphilis. Pulse, 112; temperature, 103°.

March 19. Constant vomiting. A bleb of bloody serum on left tibia, feces involuntary. Rigor; temperature, 102; pulse, 104.

March 20. *Vomitus has urinous odor.* Pulse, 120; temperature, 99.6°. An ounce of pus from right popliteal space, erythematous spots on left groin and thighs.

March 21. Left femoral vein knotted. Indistinct fluctuation in left groin. Uterus fixed and tender, cervix long and low down, os patulous. Vomitus continues urinous. Her chief complaint has been of dyspnea and painful feet. Died — 9 P. M.

Autopsy. — One ounce serum in pericardium, muscular substance of heart friable. Left lung universally, and right moderately, adherent, lungs healthy, bronchial membranes injected. Acute splenic tumor (one pound three ounces), cloudy swelling in both kidneys, right weighs six ounces, left five ounces; liver enlarged, three pounds twelve ounces; intestines normal. Uterus four and three eighths inches, cavity two and a quarter, reddish-brown pultaceous deposit in mucous membrane, substance friable; right ovary normal, left disappeared, and its place occupied by six ounces of pus. Small amount of pus in right side of pelvis, lymphatic engorgement along left femoral, vein itself healthy; purulent masses between cervix and bladder. Three ounces reddish serum in peritoneum, pus in ulnar border of left forearm.

Note. — Septicemia through lymph rather than blood-vessels. Given on account of autopsy as showing method of origin in cases of puerperal pelvic abscess.

Case XV. — R. G., thirty, married. Entered May 27, 1878.

Menses at thirteen, and always fairly regular; has been married ten years, never pregnant. Six months ago consulted a "doctor" for sterility, who "passed something into the womb;" the next day she took to her bed, with sharp, darting pain, swelled abdomen, vomiting, dysuria, and constipation; was confined to her bed for three months, and has suffered since from debility, pain in right iliac region and thigh, and dysuria. Pulse, 132; temperature, 100.7°. The cervix is well back, almost out of reach, uterus fixed, vagina hot, no fluctuation, sound enters normally as to depth. There is also considerable purulent discharge, of doubtful origin.

June 24. A spot of pus on vaginal wall, tumefaction less, uterus more movable, some nausea and vomiting. Rigor this evening. Pulse, 136; temperature, 100.6°.

July 5. Has had several discharges of pus from the bowels, no pain, catamenia appeared to-day. From this time she gradually improved; and though there was some tenderness remaining, she felt well enough on the 16th to leave, probably against advice.

Note. — Chronic case, originating in use of sound. Difficult to believe that it could not have been aspirated weeks before entrance to the hospital, with avoidance of the subsequent risks to which she was subjected.

Case XVI. — F. W., twenty-eight, married. Entered June 4, 1878.

No children, menses at thirteen, and for past year every three weeks. Three weeks ago was taken with a chill, and obliged to go to bed; no cause given. She has severe dysuria. Sensitive to pressure in hypogastric region.

June 10. Dysuria less, defecation very painful. Removal of impacted feces gave relief.

June 17. Has gained steadily under treatment, has less pain, bowels move easily, and she is able to walk without discomfort.

June 22. On vaginal examination, uterus found to be fixed, the cervix pushed to the left, and a tense, resisting mass filling the right side of the pelvis. At one point, anteriorly, there is *doubtful fluctuation.*

June 24. Vomiting; pain in back prevents sleep.

June 27. The aspirator, passed *nearly an inch*, brought away an ounce and a half of thick, creamy pus, with entire relief, and she was discharged well July 2d.

Note. — An instance of rapid relief from early aspiration. From the depth at which pus was found it is fairly probable that delay for more positive signs of fluctuation would have resulted either in more general infiltration or an opening into the bladder or rectum. Simulation of cystitis.

Case XVII. — M. A., married, forty. Entered October 17, 1878.

Catamenia always regular, but painful; married at twenty; one child the next year, none since. Three years later had "a severe inflammation in lower part of bowels," never strong since. For ten years has suspected "womb trouble," owing to bearing-down pain. Seven years ago had a second attack. Wore a pessary most of the time until two years ago, when it caused discomfort; has been worse since. Five weeks before entrance, suddenly began to flow, the menstrual period having ceased the week before. This flowing continued four weeks. Now complains of pain in the uterine region and dysuria. Pulse and temperature normal. Some prolapse of bladder, os uteri patulous; sound enters four inches. A large, dense mass, resembling fibroid, projecting posteriorly and to the right, is recognized both by vagina and rectum. Uterus movable.

October 26. For some days, besides severe abdominal pain and dysuria, has had frequent dysenteric discharges.

November 10. The rectal irritation has been more or less continuous, but without blood, and no menorrhagia. Pulse and temperature have gradually increased, and to-day are: pulse, 120; temperature, 103° — no chills. The pelvic mass on the right side now extends down between bladder and cervix, and on the left side there is tenderness and obscure fluctuation. Patient very weak.

November 17. Yesterday and day before had decided rigors. To-day twenty ounces of fetid pus were drawn by trocar per vaginam, and sac washed out with carbolized water.

November 18. Temperature, 102.8°; twelve ounces more drawn off. Evening, pulse good; temperature, 101.6°. Gradually failed, and died, exhausted, the 20th.

Autopsy. — Old parametritis forming cavities of fetid pus; Fallopian tubes changed into cavities with serous fluid; right ovary degenerated into a number of closed sacs; left ovary not found; perforation from abscesses between folds of broad ligament into the rectum below the sigmoid flexure.

Note. — Quite possible that this was originally an error in diagnosis, and that the supposed retroversion was in reality an effusion from cellulitis; secondly, when she entered the hospital the case might easily have been mistaken for a fibroid from the depth of the uterus, its mobility, the hemorrhages, the patulous os, and the absence of rigors.

Case XVIII. — H. L., twenty-two, married. Entered December 11, 1878.

Catamenia always regular, but latterly more profuse. Has had more or less hypogastric pain for two years, and for past fortnight so severe as to prevent sleep. A hard, fluctuating tumor is found, size of fetal head, on the right, and crowding uterus to other side. Fluctuation confirmed bi-manually; dysuria and prostration.

December 16. Aspirated per vaginam fourteen ounces of *dark reddish-brown fluid*, found on examination to be blood of old and recent date. Pulse, 84; temperature, 102.2°.

December 19. Cyst refilling, and two ounces of *pus and blood* were aspirated, a double female catheter inserted; cyst to be washed with carbolized water every two hours.

December 20. Two dejections; urinated without trouble. Pulse, 106; temperature, 101.9°.

December 21. Slight rigor. Temperature, 103.4°. Quinine largely, and cyst to be washed every hour.

December 22. Catheter, being obstructed, was removed, and several sloughs found adherent. It enters about two and a half inches, and on again injecting, more sloughs and debris came away. The same occurrences the following day. Temperature, 103°.

December 24. Temperature, 100.8°. Slept four hours; much relieved.

December 27. Had yesterday some diarrhœa and vomiting. Washings continued; in the evening one ounce of fetid pus was discharged.

December 30. Tumor diminished to size of a walnut, per vaginam; per rectum, size of an orange.

December 31. Temperature rising last evening; cavity was again washed, bringing away pus and sloughs; drainage tube inserted.

January 12. Much better; temperature normal; washings continued. To-day, tube having escaped, the temperature rose;

introduction of a sound allowed escape of one ounce of fetid pus, and on washing the cyst a large quantity of thick pus and shreds of tissue escaped.

January 18. Bright and well; temperature normal; sits up a few hours.

January 23. Temperature normal; sits up daily.

January 29. Walking about well. Discharged.

Note. — Hematocele, probably of old standing, with recent fresh exudation. Opened at commencement of suppurative process. Recovery probably due to repeated cleansings of the cyst with carbolized water.

Case XIX. — L. W., twenty-four, single, prostitute. Entered January 11, 1879.

Three months ago, from "over exertion with a sewing-machine," she became faint, with pain in the bowels, extending down the right leg, and dysuria. At end of three weeks an abscess "broke and discharged through the bowels" for two days. Four weeks later had a similar discharge through the vagina, and last week another by the same channel. She has now dysuria and constant abdominal pain. Pulse, 92; temperature, 101.2°. The cervix is small, conoidal, and thrown to the left, uterus fixed, the anterior and right cul-de-sacs filled with a tense tender induration, but no fluctuation.

She became more comfortable, the general symptoms improved, and she was discharged February 6.

Note. — From the symptoms, sudden effusion, etc., it was probably hemorrhagic. The case is interesting as an example of spontaneous opening into the vagina as well as the rectum.

Case XX. — H. W., twenty-three, married, entered January 13, 1879. Catamenia at fifteen. No children; but has had five abortions, the last one five months ago and accidental, from which did not recover well — "caught cold." Had hemorrhage from rectum and abdominal pain, and was confined to her bed several months. Has been able to sit up a little until last two weeks, when she had a relapse. Now has "cramps," abdominal pain, difficult defecation, and some dysuria, and is in pain all the time. The uterus is down and back, the lateral and anterior cul-de-sacs filled with a tender, firm mass, fused and continuous with the uterus, with a firm swelling in the median line, rising half-way to umbilicus, and conveying bi-manually a sensation of elasticity. Sound passes backwards two and one half inches.

January 15. Aspirated to left of cervix, evacuating eleven ounces of foul, thick, ropy pus, effacing the tumor; some hardness only remaining.

January 16. Comfortable; temperature 98°.

January 19. Some fullness and tenderness in the right cul-de-sac. Supra-pubic swelling entirely gone.

January 29. Walking about ward and discharged well.

Note. — Comparatively large abscess of long standing, but apparently confined to one cyst. Rapid recovery.

Case XXI. — L. H., twenty-five, single; entered February 24, 1879. Catamenia at seventeen and regular; last unwell four days ago. Two years since had an attack of pain and soreness in lower abdomen lasting seven weeks. For past two weeks has had pain in left inguinal region, leg, and back. Pulse 90; temperature 101.6°. Per vaginam, cervix found low down; a firm mass in the left cul-de-sac, and to a lesser degree in the right. Uterus fixed backward and to right side.

March 2. Vagina hot, cervix more toward pubes; cul-de-sac filled, the mass being readily felt above pubes. Less tenderness. Has noticed a discharge of "slime" from the rectum during last twenty-four hours, and on digital examination pus is found on finger.

March 9. Improved. Cervix still forward, uterus more movable; tumor much diminished; less tender and confined mostly to posterior cul-de-sac. Continued improvement until discharged, March 22.

Note. — Doubtless could have been aspirated before entrance, and the rectal opening and other risks averted.

Case XXII. — A. S., twenty-two, married; entered March 13, 1879. Menses at twelve, regular; has always been delicate. Married at eighteen, two children; the last born February 10. A week after delivery had pain in right abdomen, and two days later her physician "found a lump there as large as a fist." Three days later had chills repeated daily for several days, when "the lump disappeared." For past two weeks has vomited every day, but had no rigors or diarrhea. Two days ago leg began to swell. Appetite poor; retains scarcely any food or drink; no movement of bowels for a week; micturition normal, some vaginal discharge. Pulse, 128; temperature, 99.4°.

March 15. Leg less swollen, skin moist, hematuria. Pulse, 105; temperature, 99.8°. Had a sudden collapse at midnight,

pulse, 125; temperature, 102.5°; and twelve hours later another, from both of which she rallied, but subsequently failed, and died the 20th.

Autopsy. — Uterus three and a half inches, mucous membrane comparatively healthy, edema of connective tissue of left leg. A softened thrombus extended a hand's breadth above division of both iliac veins downwards; lymphatic engorgement of both legs. Purulent collection size of hen's egg in right broad ligament, and a slight cellulitis of left broad ligament; a relatively recent peritonitis and adhesive pelvic peritonitis. Acute cloudy swelling of kidneys and a little pus in the bladder.

Note. — Her condition after entrance did not warrant thorough vaginal examination. The autopsy revealed no opening into rectum, bladder, or vagina. The supposed "lump" found soon after delivery was probably the uterus.

Case XXIII. — E. H., twenty-eight, married; entered March 15, 1879. Menses at fourteen; irregular and painful for past four years. Never pregnant. Doubtful history of syphilis. Has had pain and uterine trouble for thirteen years; last menses three weeks ago. *Able to work until a week since*, when she took cold, and has had until now painful defecation, dysuria, and nausea. Pulse, 78; temperature, 100°. Uterus enlarged, depressed, immovable and anteverted, and the anterior and lateral cul-de-sacs are full and tender.

March 30. Has improved until to-day; has now sick headache and pain in the right inguinal region shooting down to the knee.

April 2. Pain now in left leg and none in the right. No enlarged glands, and no evidence of inflammation in lymphatics or veins.

April 9. More fullness in left cul-de-sac, and *doubtful fluctuation.*

April 13. Under ether sound passes to normal depth. By aspiration an ounce of *serous* fluid was evacuated with such relief that on the 25th she was up, about the ward, and discharged.

Note. — The pain and other symptoms, together with the antecedent history, made an early evacuation desirable.

Case XXIV. — B. E., thirty-two, married; entered April 12, 1879. Catamenia at fifteen, always irregular, never pregnant. Has run a sewing machine for five years. Says she had a similar attack six years since. During menstruation, two weeks ago, seized with sharp paroxysmal pain in right hypochondrium, which

still continues. Has had no vomiting. Some tenderness in umbilical and hypogastric regions. Temperature, 100.2°. Micturition followed by stinging pain; has leucorrhœa and pelvic tenesmus.

April 14. Less abdominal tenderness, no distention, flow continues; has *vomited* for twelve hours.

April 16. Vaginal examination shows cervix directed to the left, immovable, and surrounded by a hard, resisting mass, most manifest on the right; tenderness before and behind uterus; no fluctuation, and no resistance on pressure above pubes; slight menorrhagia; chilly sensations for thirty-six hours, but no rigor. Has had no acute pain.

April 19. Menorrhagia ceased.

April 28. Exudation on right side diminished. On the left it is more circumscribed and can be felt on pressure in the left iliac fossa.

May 15. Slight fluctuation being found to the left of the cervix half an ounce of pus was aspirated. From this she improved; on the 26th was up and about, and two days later discharged, probably at own request.

Note. — Shows the rapid relief following the early removal of a small amount of pus, — probably of very recent menstrual origin.

Case XXV. — M. R., widow, twenty-one. Entered May 5, 1879.

Never pregnant. Catamenia always painful, but regular with following exceptions: Eighteen months ago flowed for twenty days, seven months ago for ten days, and last month twenty-one days. Two weeks since pain in inguinal region began, and still persists. At first vomited a good deal. Has now to urinate every five minutes. Pulse, 92; temperature, 101.8°. A firm, elastic mass was felt in the anterior cul-de-sac, from which twelve ounces pus were drawn by trocar, and the canula left in. On the 12th had another and fetid discharge, after which she improved rapidly to the 31st, and was discharged well.

Note. — Shows the advantage of early aspiration.

Case XXVI. — E. H., twenty, married two years. Entered May 23, 1879.

Never pregnant; catamenia regular. Taken sick two months ago with dysuria and pains in lower abdomen, which have been steadily growing worse, — has had several chills, cannot lie on either side, and has had two to four dejections daily. Micturition is now normal. Last catamenia occurred a fortnight since.

May 28. Has had a slight chill every day, with a temperature high at night and normal in the morning.

June 2. *Obscure fluctuation* being found behind the uterus, a trocar was inserted, giving vent to a large quantity of pus. Canula left in and replaced the next day by a drainage tube.

June 3. Sac injected, and a large quantity of pus again obtained. The discharge continued free until 13th, when she had a *chill* in the afternoon.

July 7. Injections have been continued, discharge much diminished, a large, firm tumor was now perceptible above the pubes, and to left of median line.

July 18. Discharge ceased. Indurated mass size of an orange still felt above pubes and in left cul-de-sac. Not tender. No recurrence of the discharge, and her anemic and other symptoms gradually improved until August 10, when, by vaginal examination, the tumor was found reduced to the size of an English walnut. No tenderness; uterus pressed somewhat forward and slightly movable.

August 23. Sitting up, bowels right, sleeps well, and, being unruly, was discharged.

Note. — An acute case, illustrating the good effect of early aspiration, although the fluctuation was obscure.

CASE XXVII. — E. D., single, twenty. Entered May 31, 1879. Catamenia at sixteen. Free but irregular, lasting three days, and followed by debility. Otherwise in good health until this attack. Was unwell three weeks ago, last week slightly so, and for past three days more profusely, and accompanied with sore throat. Has constant leucorrhea; pain in back, bowels, and down the legs; constipation; dysuria. No vomiting.

June 2. A soft, fluctuating swelling is found in the right pelvis, projecting into the vagina behind the cervix, and extending above the pubes. A "considerable quantity" of pus was drawn by the trocar, sac washed out, and canula left.

June 6. The cavity is injected daily, and a "bloody, purulent fluid" washed out. Canula replaced by drainage tube. No chill.

June 13. The orifice having contracted was dilated. The injections were continued, and she gained strength and color until the 23d, when she had a chill, and temperature of 104.3°.

June 30. Gained steadily; no bad results from the chill.

July 7. Discharge continues free. Induration still felt above pubes.

July 18. Both discharge and swelling have diminished. Still some soreness to the right of the cervix.

July 21. Still some discharge. Cervix more movable, pain and swelling nearly gone.

November 21. She has continued gaining, but slowly, for four months, suffering much from indigestion. The discharge has ceased, she has been about the ward for a week, and is now discharged.

Note. — Probably an hematocele with early suppuration. Large accumulation of pus in three weeks, as shown by size of tumor on entrance.

Case XXVIII. — B. A., nineteen, single. Entered June 5, 1879.

Catamenia at thirteen, regular and painless; last appeared the 19th of May, — has had constant pain on left side for a week, worse while standing, — no cause given; no nausea, costive, occasional dysuria. Has had chills. Uterus down, and back upon the rectum. Sound passes backwards to normal depth. A tumefaction the size of an orange is felt in anterior and left pelvis, with *indistinct* fluctuation.

June 8. Under ether eight ounces *of clear fluid like urine* were drawn off by trocar, followed in a few hours by slight rigor.

June 26. During past fortnight has had a severe attack of tonsillitis. Has to-day pain and tenderness in left iliac region, and four loose, greenish dejections.

June 27. The cyst, having refilled, was again punctured and a quantity of *fetid pus* drawn. The cavity was washed out, and the canula left in for drainage and daily washings.

June 30. Canula was replaced by drainage tube. The site of the puncture looks sloughy, and is covered by a *diptheritic exudation.*

July 5. Puncture healthy, and discharge of pus free.

July 21. Tumor diminished; discharge still free and offensive.

July 31. Has had some pain in right iliac region and above pubes, but it is less now.

August 7. Had diarrhœa, which continued until 17th, when she is reported as having little pain, and but little odor from the purulent discharge.

August 23. Uterus movable. Some induration and fullness in the right cul-de-sac.

August 27. Steadily improving; able to sit up. She continued to improve daily for a month, and was discharged September 27.

Note. — The constant pain, dysuria, and rigors, called for the prompt use of the trocar. Between the first and second aspirations the *serum* had become *fetid pus*. The tonsillar and diphtheritic complications are also noticeable.

Case XXIX. — E. C., married. Entered July 29, 1879.

Has had two children, youngest two years old, since when she has been weak, with pelvic pain and "falling of womb." Micturition normal. A year ago had dysuria, and bloody urine; dejections always painful. Was in another hospital for three months last year and had operations upon both cervix and perineum. Has had night sweats for four months. Five weeks ago she took a strong cathartic for "supposed tape worm," and has had "chills" since. For two weeks has had pain and vomiting, but was not confined to bed. Yesterday had chills and vomiting. Pulse weak, 120, temperature 103°. Cervix uteri is pushed forward by a fluctuating tumor, which fills the posterior cul-de-sac, extending posteriorly half way to vulva. Under ether over a pint of *thin fetid fluid* was removed, and at the end a few drops of *pus*. Much prostrated.

July 30. Thirsty, nauseated, retains nothing, abdomen painful, distended, and tympanitic. Again etherized, and while being moved to the operating room to insert drainage tubes a large quantity of fluid gushed from vagina, with entire subsidence of tumor. Vomiting continued.

July 31. Feels better, retains milk and lime-water; catheter not required. Several dejections. Has dyspnea but no pain when still.

August 2. Has had nausea and profuse sweating. A little "slime" is noticed in the dejections.

August 6. Decidedly better. Turns without assistance. No vomiting.

August 8. Good appetite. Considerable thin, watery, fetid discharge. Some bulging of vaginal wall again, from which during the day there were several gushes of a pint or more of very offensive fluid.

August 9. Another discharge of more than a pint of thick yellow pus gave great relief.

August 17. Still a purulent discharge, but not offensive. Some abdominal tenderness remains. Good appetite, and she wishes to sit up.

August 28. Another accumulation was aspirated. Half a pint

of pus with urinous odor was obtained, followed by dysuria, and bloody urine, but in a few hours the micturition again became normal. She continued improving for a month, when she was able to walk about a little. A slight but offensive discharge remaining.

October 8. Feeling "perfectly well" she was allowed to leave, although there was still a slight discharge of pus from the vagina.

Note. — The enormous discharge from this disintegrated hematocele and the grave symptoms accompanying it are noteworthy, in view of her recovery. There is a record of vaginal douches, but none of the sac itself. The contrast with other cases in which the sac was kept washed out is instructive. There seems to have been at one time a communication with the bladder which soon closed. The recorded chart shows a very long continuance of high temperature and pulse.

Case XXX. — L. B., married, twenty-seven. Entered August 9, 1879.

Catamenia at sixteen, and fairly regular, until the past eight months, since when they have wholly ceased. Has been married four years and thinks she has never been pregnant. At the cessation of the menses, eight months ago, a swelling began which "broke" a month later and has been discharging from the rectum ever since. During this period has had "distress" from swollen bowels, otherwise no pain. At one time had dysuria but little pain on defecation, no vomiting, appetite good. Has occasionally slight swelling of the feet.

August 11. Upon vaginal examination the uterus was found fixed, the os pointing forward and to the right, with a band of induration encircling the cervix. Sound passes less than normal distance.

August 12. For some reason not given she was taken away by her husband.

Note. — This case is given as one of doubtful diagnosis, she unfortunately not remaining long enough for the formation of a definite opinion. The sudden cessation of the menses, with the discharge per rectum commencing a month later, make it quite possible that it was a case of extra-uterine pregnancy, which opened early into the bowel.

Case XXXI. — R. G., twenty-one, single. Entered December 9, 1879.

Catamenia at thirteen, painful but regular; never had any chil-

dren. Nine months ago was chilled while menstruating and had cramps and pains in the right side. These recurred with every subsequent menstrual period, and with leucorrhea in the intervals. Is of late irregular, varying from two to five weeks, the last time being a week ago. Has had vomiting after eating, lumbago, and pelvic tenesmus; has constipation and dysuria. Being dissatisfied she left against advice, but returned March 19, 1880. Menses began three weeks ago, and the flow and pain still continue.

March 29. Sound enters two and three fourths inches. An indurated mass to the right of and behind the uterus.

April 2. Had chill, with pain and swollen bowels.

April 9. Abdomen less tender. Dullness on percussion, and resistance to pressure in the left groin. Has had diarrhea, and *slight vaginal hemorrhage* for a week.

April 19. Douglas' pouch is now filled with a tense, yielding mass. Half an ounce of sero-purulent, bloody fluid was drawn off.

April 22. Had severe rigor last evening. By aspirator a small amount of offensive pus was obtained to the left of the cervix, and the orifice being enlarged by the bistoury three ounces more escaped.

April 24. Is very anemic. The sac has been washed twice daily and discharges freely. Says she feels "first-rate."

May 8. The discharge gradually diminished, and to-day she left the hospital well.

Note. — The effusion was probably originally hemorrhagic; aspiration coincident with the earlier symptoms of suppuration was followed by rapid recovery.

Case XXXII. — A. N., thirty, married. Entered December 24, 1879.

Has had three children; the youngest is six years old; had also a miscarriage one year ago at the third month. The last catamenia began three weeks ago, and for a fortnight she was chilly and feverish, with sweating, and the bowels tender and painful. Says that four days ago she began to have a discharge from the rectum, which is very offensive; has some difficulty in urinating, but *no pain*, and the other symptoms have abated. The uterus is fixed; a dense mass in posterior and lateral cul-de-sacs, with little tenderness. Digital examination reveals an opening in the recto-vaginal wall.

December 25. Nurse thinks that a rectal injection given re-

turned through vagina; but four days later a similar injection took its proper course.

January 15. Has been improving, but had two rigors yesterday. The uterus is slightly movable, and the exudation diminishing.

January 31. No induration remaining. Discharged well.

Note. — Probably had cellulitis at time of miscarriage, the exudation becoming a focus for renewed irritation at the last menstrual period, from some unknown cause. Could probably have been aspirated with benefit before entering the hospital.

Case XXXIII. — K. G., twenty-three, married. Entered March 16, 1880.

Two children; last, three years old. Two years ago had a miscarriage at seven weeks, induced by medicine; has had "inflammation of womb" ever since. Vomits at times; has lived on liquid diet for four weeks; has pain in left lower abdomen with constipation, and painful defecation; micturition not too frequent, but painful; has been two weeks in bed. On examination a firm, hard mass is found in left cul-de-sac.

March 28. Uterus movable; cervix well back; thickening in posterior and right cul-de-sacs, and a firm mass, well-defined, high up in left ovarian region; but little tenderness.

April 7. Cul-de-sacs free; slight tenderness high up on left side and more marked in left iliac region, where there is a feeling of resistance.

April 15. Left hospital at her own request, but returned.

May 19. Reports that she was comfortable for a time, but for past fortnight has been in bed. Has now severe abdominal pain, dysuria, constipation, painful defecation, and vomiting; occasional menorrhagia.

May 24. Vaginal examination revealed fluctuation in the recto-vaginal wall, near the apex of the perineum. This was opened, and seven ounces of clear fluid resembling ascitic was removed.

May 28. Improving; able to dispense with catheter. She continued to improve, and left June 26 at her own request; a hard, tender lump remaining to the right of the cervix. No subsequent history.

Note. — The serum would indicate that she had pelvic peritonitis four weeks before entrance, which was being absorbed, when she left the hospital long enough to be subjected to some

unknown cause of relapse, and being a young married woman it is easy to conjecture what it was. The unusually low position of the fluid is also noticeable.

Case XXXIV. — M. K., twenty-three, widow. Entered March 3, 1880.

Catamenia regular; one child, eighteen months old; has had leucorrhea for a month; taken with chills three weeks ago. The pain was at first general over the abdomen, but finally settled in left iliac region, and is increased by defecation; micturition normal. The uterus is partially fixed; sound enters two and three fourths inches in normal direction; to the left of the uterus is a mass the size of an orange, easily felt over pubes, and with an indistinct fluctuation.

April 5. Flowing since entrance; no pain until to-day, when it appeared in hypogastric region; nausea, but no vomiting. By aspiration one ounce of clear pus was withdrawn.

April 9. Has had no tenderness, chills, or pain, but for thirty-six hours has had vomiting and diarrhea; pulse weak, 132; temperature normal. By use of brandy, ice, morphine, and injections of chloral hydrate, is now relieved.

April 13. Steady improvement; feels well; some painless induration felt per vaginam.

April 24. Discharged well.

Note. — An acute case, relieved by early aspiration of a small amount of pus.

Case XXXV. M. M., thirty-four, married. Entered May 8, 1880.

No miscarriages; one child, two years old, and menses have not appeared since. Had "cholera morbus" a year ago, followed by pain in abdomen and bloating; now has pain in back and hypogastrium, extending to thighs, and dysuria; tumor over pubes size of four and one half months' pregnancy; extends to within an inch of umbilicus; denies pregnancy; bi-manually it seems more tense than pregnancy; cervix short, os patulous, breasts natural; no pain; had morning nausea until two months ago; vaginal roof pressed downward; the mass extends to right and left of cervix, but not posteriorly; on the right irregular, and with sense of fluctuation; sound passes two and one half inches backwards and to left; catheter takes a similar direction. The aspirator was inserted *two inches*, and three ounces of offensive pus drawn, leaving an indurated mass to the right.

June 8. Needle again inserted *two and one half inches*, and five ounces of thick *offensive chocolate*-colored fluid drawn.

June 11. Has had several discharges of dark urine; tumor much smaller and without fluctuation.

June 16. For two days has passed bloody urine with pain; a lump to the left of the cervix, and about its size, gives indistinct fluctuation; surrounding parts resistant and inelastic. Under ether an ounce of thick, chocolate-colored, inodorous pus was aspirated, and upon enlarging the opening with a bistoury seven ounces more of foul dark colored pus was obtained. The edges were touched with the actual cautery, and the cavity washed with carbolic water.

June 17. The discharge from the opening has a urinary odor.

June 19. No increase of pulse or temperature; but little tenderness; urine normal in color; no pus from washing cavity.

July 6. Urine, drawn by catheter, perfectly natural; six ounces of water injected into bladder without any appearance of it in vagina.

July 15. Rigor; no localized pain; pulse, 112; temperature, 104°; nervous and excitable.

July 16. Pulse and temperature normal.

July 19. Tenderness and induration in anterior cul-de-sac; urine now contains both pus and blood.

She gradually improved for four weeks, until August 20, when she left at her own request, the fistulæ having closed some time before.

Note. — From history and symptoms, this was probably an old hematocele. The aspirator or bistoury may have penetrated the bladder, but it is quite as probable that the vesical opening was a spontaneous one.

Case XXXVI. — M. A., widow, twenty-seven. Entered July 13, 1880.

Was in hospital in April with acute rheumatism; her history obscure; addicted to alcohol. Was taken the day before with profuse diarrhea and vomiting. She died a few hours after admission.

Autopsy. — Pelvic peritonitis, septico-pyemic, vagina lacerated within the fourchette down to the muscular layer, and supposed to have been caused by a pessary. Fallopian tubes closed and filled with dark fluid like bile. The uterus contained only a small, sub-mucous fibroid.

Note. — Valuable only for the autopsy, as showing the earlier stages. Nothing in uterus to explain the condition of the Fallopian tubes or the septico-pyemia.

Case XXXVII. — M. C., twenty-one, single. Entered August 6, 1880.

Was delivered at a woman's hospital six weeks ago of her first child. Thinks that the labor was difficult, and that she lost much blood. She remained there three weeks, at end of which time the baby was sent away. No trouble with her breasts afterwards, but has had pain in the right iliac region; vomiting and dysuria ever since.

August 21. Improved somewhat, but has had more or less nausea, and now has pain in right leg and inner aspect of thigh; no vaginal discharge; constipation; the uterus is firmly fixed, the os high up and back, the cervix obliterated, the fundus forward. Sound enters normal distance only, and with a sharp curve forward.

September 15. Vomiting has continued; micturition is less painful, right thigh painful and flexed. The right pelvis is now filled with a tumor, obstructing the passage to the os. There is doubtful, deep fluctuation.

September 19. There is a diminution in the size and hardness of the pelvic tumor. The fundus uteri is firmly bound down in extreme anteflexion.

October 8. Has continued better and worse until to-day, when an incision in the upper inner side of the thigh gave two ounces of pus.

November 20. She gradually gained, and now walks about freely, but with a crutch. On the 23d was discharged well.

Note. — Her condition permitting it pus could possibly have been reached per vaginam on the 15th of September, and preventing the extensive burrowing and permanent lameness. This case would have been described by the older French writers as one of *dépôt laiteux*.

Case XXXVIII. — E. R., thirty, single. Entered September 22, 1880.

Menses at fourteen, and regular until eighteen months ago, when she began to have frequent and painful micturition. No history of the cause, and no reason to suspect that she had ever been pregnant. A year ago had an abscess in the pelvis, which opened into the rectum, after which had menstrual suppression

for seven months. During last five months has been slightly unwell twice. In July last a swelling appeared in right groin, was opened three weeks ago, and is now discharging. Has never had leucorrhea or any purulent discharge from vagina. Excessively emaciated and feeble, right leg flexed and painful, has good appetite, and sleeps well.

September 24. During digital examination pus escaped from the vagina. Her condition forbade any search for its origin. Uterus in position, sound entering two inches. Colliquative diarrhea set in, she gradually sank, and died November 4.

Autopsy. — Old perimetric inflammation; intestines adherent to uterus in every direction. A fistulous opening connected with right side of bladder and upper part of rectum, and communicating with the fistula in the groin. Psoas and iliacus muscles implicated. Ovaries a mass of pus. Between layers of right broad ligament a large amount of pus not confined to distinct walls; general implication of connective tissue.

Note. — The history upon entrance though imperfect is still sufficiently suggestive. Eighteen months before, vesical irritation, suggestive of effusion from peritonitis or cellulitis (which, if recognized at all, apparently had no efficient treatment), followed at intervals of six months by one abscess opening into rectum and another to the groin, with increasing exhaustion and an autopsy.

Case XXXIX. — L. S., married, age thirty-eight; entered September 30, 1880.

Menses at fifteen, regular until four months ago. No children; miscarried at eighth month, thirteen years since. Has had from that time more or less treatment for uterine trouble. Says that six months ago *watery vaginal discharge* began and continued for three months, when she entered Massachusetts Hospital, May 27. By kindness of Dr. Hodges I am able to give her history there. "Admitted with large tumor on right side of uterus, bulging into vagina." "Twenty-two ounces of clear red fluid drawn."

"*June* 7. Tumor having refilled, incision made and drainage tube inserted, about same amount removed." Cavity washed out with carbolized water, daily.

"*June* 15. Discharge very fetid."

"*July* 3. Drainage tube removed. The discharge ceased for a short time, but returned August 12, and continued until her discharge, August 25. During the last month gained flesh and was

able to go into the yard." She has now pain in back and bowels, bearing down, dysuria, and painful defecation with tenesmus. Pulse 124; temperature, 104°. Has had purulent discharge since leaving Massachusetts Hospital.

October 1. A large, globular mass to right and behind cervix was aspirated, and two ounces bloody pus removed, — to be washed out with carbolized water daily.

January 5, 1881. Five ounces fetid pus discharged; drainage tube which had been removed was put back, and the sac washed with tincture iodine.

February 16. Since last report has had one rigor, more or less nausea and vomiting, and constant pain, but her general condition is better. She continued better and worse until April 20, when an induration appeared in the right groin. A fragment was now removed from the edges of the sac at the vaginal opening and pronounced by Dr. Cutler to be cancer.

April 27. Failing, anasarca, pulse feeble, tympanites.

May 9. Was discharged at her own request, with cauliflower granulations surrounding the vaginal puncture.

Died at home, in June. No autopsy obtainable.

Note. — A broken-down hematocele of long standing. Whether the epithelial disease was primary or secondary is doubtful. In either case it is noteworthy as of rare occurrence in this connection.

Case XL. — A. K., single, twenty-five, prostitute; entered October 1, 1880. Brought from a house of ill-fame by the police, supposed to have had an induced abortion; delirious. No history obtainable, tongue dry, foul, and covered with sordes.

October 4. Cervix bilaterally lacerated, vagina hot, offensive purulent discharge, feces and urine involuntary, pulse 112; temperature 102°. To have quinine and whiskey freely, and uterine injections of permanganate of potash three times daily. In the evening refused, or was unable, to swallow, and the stimulus was given by rectum.

October 5. Much the same, discharge less offensive, *no tenderness* above pubes, uterus measures four inches. Temperature 102°.

October 6. Vomited last night; brighter to-day, tongue cleaning, takes food, temperature normal, but still has retention of urine and involuntary dejections.

October 7. Catheter omitted; slept three hours; opening now found in cul-de-sac admitting tip of finger. Pus free, creamy, and offensive.

October 8. For first time a thorough examination practicable. Uterus slightly forward and movable; cervix lacerated and patulous, and the sound enters three inches and a half. Rent in cul-de-sac one quarter inch long, probe passing downward and backward along the rectum for three inches; two and a half ounces of pus escaped, and both sac and uterus were injected with permanganate.

October 11. Able to ask for increased diet and to answer questions. Says she had a child twelve months ago at Lying-in Hospital, etc.; "is afraid they will kill her if she recovers."

October 19. Pus still free from both uterus and sac, but *inodorous.*

October 27. Able to sit up. Abscess so contracted that daily injection is omitted.

November 7. During an injection of the sac had several convulsions, followed by unconsciousness, possibly from rupture. Had some recurrence of bad symptoms until the tenth, when flowing, probably menstrual, came on and lasted three days.

November 27. Small amounts of pus continue to flow from the contracted sac. Tincture of iodine was applied to its inner surface and the next day the discharge finally ceased.

December 8. Was discharged well.

Note. — This is given at some length as showing the effect of injections, the possible rupture of the sac by too forcible use of the same, and as an instance, also, of rapid contraction and absorption of the cyst walls in a very unpromising case. It is quite possible that the abortionist not only punctured the posterior cul-de-sac, but pushed his instrument through the posterior wall of the uterus.

Case XLI. — M. McG., twenty, married. Entered November 9, 1880.

Menses at thirteen, regular; one child, a year old, which she nursed; good recovery. Menses reappeared some months ago, and continued normal until three months since, when she became pregnant. Four weeks since took "tansy tea," and had profuse flowing and pain for a week, when, and while still flowing, she took cold, followed by severe pain, dysuria, difficult defecation, and leucorrhea. She then ceased nursing. Has now an open right mammary abscess; left breast lumpy and tender. She has excessive tenderness and heat in the left lateral cul-de-sac, with severe pain and febrile excitement.

November 14. Pain diminished. Has a small hard spot to the left of the cervix two inches in diameter, from which pus escapes by a spontaneous opening.

November 27. Has done well until to-day. Temperature is now up to 105°. Had quinine and opiates and no bad results.

December 7. A large mass has now developed to the right of the cervix, and the latter is livid and almost obliterated by the bulging of vaginal wall. By aspiration, half an ounce of pus and blood was withdrawn.

December 16. Nothing remains but a small, hard spot, size of an almond, and painless.

December 18. Discharged well.

Note. — Had spontaneous opening at one side of cervix and aspiration on the opposite side. The latter, giving but half an ounce of pus, was followed by rapid recovery.